

EXPERIENCE

U.S. EPA Region 6—Dallas, TX (40 hours/week) Sept. 2019–Present

Physical Scientist—GS-07, 09, 11 (Note: Receiving GS-12 September 30, 2022)

Offshore Oil and Gas Program, Energy Compliance Section, Enforcement & Compliance Assurance Division

Current Supervisor for Reference Check: Anthony (Tony) Loston—214-665-3109

- Developed and oversaw over 15 enforcement cases under the Clean Water Act (CWA) and Safe Drinking Water Act (SDWA) including compliance orders
- Conducted over 5 CWA off site compliance inspections under environmental laws, including the CWA and SDWA
- Liaison and lead for writing EPA Region 6's annual Biological Opinion (BiOp) Report and interagency consultation to determine compliance with the Endangered Species Act (ESA) and answer questions post-report
- Finalized technical documents including inspection reports and enforcement documents that made compliance determinations, including 2 technical analyses (e.g., waters of the U.S.) in GIS and other mapping software
- Reviewed and helped prepare the reissuance and modifications of the "GMG290000 NPDES General Permit" while providing regulatory comments for modifications and permit guidance as the lead for the Enforcement and Compliance Assurance Division.
- Provided technical support to offshore industry, Office of Regional Counsel, federal agencies on scientific criteria and methods, impacts of pollutants regarding effluent violations and discharge monitoring reports, and technical and legal challenges of the permit.
- Respond to permit inquiries regarding enforceability, identifying discharges, and provide compliance assistance for pollutant discharge issues
- Help implemented a MOA & MOU between EPA and BSEE, a cooperative agreement between two federal agencies
- Maintained strong relationships and collaborations in the Gulf of Mexico with federal agencies such as Bureau of Safety and Environmental Enforcement (BSEE), U.S. Coast Guard (USCG), and NOAA Office of Satellite and Product Operations within the National Environmental Satellite, Data, and Information Service (NESDIS) to enforce environmental regulations
- Trained over 2 team members of internal processes and technical knowledge related to the CWA and the offshore industry
- Implemented region wide trainings on a team, including the 2021 EPA R6/States NPDES National Inspector/Enforcement Officer Training and the 2020 Annual Civil and Criminal Training

- Developed over 5 enforcement process consistencies and language with Standard Operating Procedures (SOPs) for the water enforcement programs, including consistent enforcement documentation formats, training on processes, and records of communication
- Provided key technical recommendations for complex environmental enforcement cases with platforms, mobile offshore drilling units, subseas, and service contracting companies, including cases with multiple agencies at the federal level and within the oil and gas industry to resolve environmental issues
- Collaborated with BSEE's federal staff on CWA regulatory functions, conducting inspections, and enforcement processes, to regulate facilities under water regulations
- Manage team goals and strategies to meet internal policy requirements for each fiscal year such as enforcement actions
- Managed 10 Notice of Potential Violation and Concerns, over 15 Administrative Compliance Orders (ACOs) and over 5 BSEE Inspection Reports for the Offshore Team to meet our offshore Administrative Orders numbers and ensure enforceability by having one on one meetings with my teammates to confirm they will write their ACOs before the quarter ends
- Reviewed Satellite Imagery of potential oil spills in the Gulf of Mexico to determine a facility's potential noncompliance of the CWA and as a targeting strategy in offshore
- Supported the Offshore Administrative Order Task Force of 2020 by holding a web posting training, writing administrative orders, and assisting others in writing 23 offshore Administrative Orders
- Provided compliance assistance with multiple offshore industry companies on the "GMG290000 NPDES General Permit"

HandsOn New Orleans—New Orleans, LA (40 hours/week) Aug. 2018 – Aug. 2019

AmeriCorps VISTA in Disaster Management

- Created a Disaster Resiliency Training Center model alongside United Way of Southeast Louisiana to teach residents on the four phases of emergency management, bring disaster management stakeholders together, and teach low-income residents about available resources
- Created and presented on ways to stay prepared for potential natural disasters
- Team Lead in evacuations of the City of New Orleans with Evacuteer and member of the Louisiana Long Term Recovery Committee as the HandsOn New Orleans representative
- Managed social media and public website relations to successfully provide information to residents and community partners on emergency preparedness
- Write and manage grants related to disaster mitigation and recovery
- Assisted United Way of Southeast Louisiana, the Red Cross, and Catholic Charities in case management and aid for recovery victims by organizing and managing case management loads and contact lists

- Led volunteers from 10 to 500 people in disaster recovery and other volunteer projects such as Ben and Jerry's Ice Cream environmental justice and stormwater management projects
- Project managed a 300-person corporate volunteer event over the course of six months with multiple community partners and six neighborhood tours surrounding issues in climate and racial justice
- Worked alongside local government in recruiting disaster participants in recovery/response, sheltering, food distribution, warehousing, etc.

National Snow and Ice Data Center (NSIDC)—Boulder, CO
(15hrs/week)

Feb. 2017 – May
2018

Undergraduate Research Assistant

- Contributed to the Glacier Photo Collection project in NSIDC's archives in analyzing over 2,000 gelatin silver print photos of glaciers including identifying glacial characteristics, hazards, locations, coordinates and glacier names globally into a comprehensive online, searchable collection of photographs of glaciers. [Glacier Photograph Collection Project](#)
- Collaborated with the NASA's Science Data Systems Branch at Goddard and at the Earth Observing System Data and Information System (EOSDIS) discipline-specific distributed active archive centers (DAACs) to research and pinpoint the cumulonimbus clouds of Antarctica during the 1950s.
- Assisted with NSIDC administrative duties which include organizing meetings and events, filing, scanning, ordering supplies, education and outreach as well as supporting scientists with research projects

Natural Hazards Center (NHC)—Boulder, CO (10hrs/week)

Jan. 2018 – May
2018

Intern

- Collaborated with the Colorado State University Center for Risk-Based Community Resilience Planning on one of several teams assigned multiple research tasks to integrate into the unique Interdependent Networked Community Resilience Modeling Environment (IN-CORE), which allow users to optimize community disaster resilience planning and post-disaster recovery strategies. [Center Research Project](#)
- Contributed in the Early-concept Grant for Exploratory Research (EAGER) project which establishes scientific platforms and coordinating networks to increase the capacity of hazards and disaster research communities to carry out comprehensive extreme events rapid reconnaissance research. This includes mapping disaster research centers across North America. [Disaster Centers](#)

CERTIFICATIONS AND TRAINING:

National Pollutant Discharge Elimination System Inspector and Enforcement Officer
Credentials

Offshore Oil and Gas

Onshore Oil and Gas (Brine)

Underground Injection Control (UIC) Wells

24-Hour OSHA HAZWOPER Training

Incident Command System (ICS) 100, 200, 300, 400, 700, & 800 Courses (2019-2021)
(Emergency) Response Support Corps Trainings

EDUCATION

College of Arts and Sciences, University of Colorado Boulder—Boulder, Colorado, May 2018
B.A. in Environmental Studies; B.A. in Geography GPA 3.1/4.0
Undergraduate Department of Geography Commencement Speaker;
Undergraduate Department of Geography Board Member;
President/Member of the CU Geography Club

EPA VOLUNTEER EXPERIENCE

Environmental Justice in Enforcement Workgroups, Engagement, Subgroup - Press and Elected Officials, *Member* (2021 - Present)

Region 6, Special Emphasis Programs, Federal Women's Program, Event Planning sub-group member, (2019- Present)

Region 6, Special Emphasis Programs, Women in Science and Engineering, Event Planning sub-group member, (2019- Present)

Region 6, Special Emphasis Programs, Hispanic Employment Program, Outreach and Social Committee Member (2019 - Present)

Region 6, Enforcement and Compliance Assurance, Staff Training Team, Member (2020)

Region 6 Environmental Management Systems, Enforcement and Compliance Assurance Division Representative (2020 - 2020)

Region 6 Geographical Information Systems User Group, Member (2019 - Present)

EPA Response Support Corps, Volunteer (2019-Present)

Perot Museum of Nature and Science Presenter and Outreach (2020)

COMMUNITY INVOLVEMENT

Volunteer, Disaster recovery services in mucking and gutting and mold remediation in North Carolina for Hurricane Florence recovery, Wilmington, NC (2018)

Member, *Disaster Action Team (DAT) of the Red Cross, New Orleans, LA* (2018)

Volunteer, *CU Boulder Alternative Breaks: Partnered with the St. Bernard's Project and AmeriCorps to assist in restoring homes for Hurricane Katrina Victims for the 10th anniversary, New Orleans, LA* (2015)



SUMMARY

- Over 17 years implementing federal, state, and tribal CWA and CERCLA programs.
- Innovative, holistic approaches to addressing technical challenges, improving program performance.
- Ability to gain trust and cooperation with diverse groups.

PROJECT MANAGEMENT AND WATER MEDIA PROGRAM EXPERIENCE

- Project Officer (PO) managing multi-year cooperative agreements totaling \$20M with [California's Nonpoint Source Program \(CWA §319\)](#). Monitored workplan progress, complex components such as subawards, and approved \$4.5M annually for watershed restoration projects. Required review of project technical standards, compliance with Total Maximum Daily Load (TMDL) allocations, program guidelines, restoration techniques, and relevant state, tribal, and federal regulations, ensuring that program actions are effective and support emerging needs (2009 - 2013).
- Oversight of \$5M in multiple concurrent grants and cooperative agreements with [Navajo Superfund Program](#). Substantial program changes, including use of third-party accountants, was recommended to address ongoing financial tracking problems in grantee (2013 - 2016).
- Contracting Officers Representative (COR) with EPA supporting CERCLA §104 and 105 tasks in accordance with Federal Acquisition Rules and agency policies and practices. As both a COR and contractor to EPA, USACE (under an Interagency Agreement with EPA), and Navajo Nation, developed RFPs, scopes of work, QAPPs, cost estimates/IGCEs, and contract awards. Monitored tasks, schedules, and reviewed invoices and budget (2008 - present).

TECHNICAL EXPERTISE IN WATER QUALITY AND RESTORATION PROGRAMS

- Trained EPA Region 9 Wetlands enforcement staff on use of a combination of field-based, GIS, and hydrologic modeling approaches, as a new course of action to evaluate significant nexus to Traditional Navigable Waters in defining waters of the US (WOTUS) (2010 – 2013).
- Co-author of reports discussing programmatic use of GIS, water quality monitoring, field-based methods, and remote sensing in TMDL implementation, watershed planning and restoration, and CWA §402/404 decisions (2012 – 2019).
- As an Enforcement Officer for CWA §402/404 programs, Remedial Project Manager (RPM) for CERCLA §105 sites, as a technical resource to the CWA §311 program, and as a volunteer, conducted wetland delineations, WOTUS jurisdictional determinations, bioassessments, fisheries surveys, and geomorphic studies in various streams in Navajo Nation, CA, OR, AZ, and NV, including fish monitoring, habitat mapping, and estimating flow frequency and discharge volumes (2005 - present).

ABILITY TO RESOLVE PROBLEMS OF MAJOR SIGNIFICANCE

- As RPM, COR, and site lead, completed a [watershed assessment](#) of [Cove Wash](#) in the Navajo Nation, a 47 square-mile, high value alpine watershed with 50 abandoned uranium mines, widespread impacts to soil, surface water, and groundwater, contamination of the community's drinking water source, and long-term impacts to traditional practices and trust in federal agencies. Area includes archeological sites, federally-listed species, and challenging terrain. Sampling design incorporated Safe Drinking Water, Endangered Species, National Historic Preservation, CWA §303(d) program input, but started with documenting community concerns. Integrated Traditional Ecological Knowledge, used culturally-appropriate methods to gather data, and developed short- and long-term cleanup goals. Using cultural sensitivity was an important step in establishing community trust in the cleanup process in this unusually complex and controversial site (2013 - 16).



EMPLOYMENT HISTORY

1/17/17 – Present **Project Manager for CERCLA, Public Law 86-121, and Stafford Act projects**
Weston Solutions, Inc. Supervisor: Joe DeFao
Salary: \$113,130.37, 40 hrs/week

8/1/14 – 9/30/16 **Remedial Project Manager for CERCLA §105 projects and
Project Officer for CERCLA §128 & §311 projects (concurrent assignment)**
US EPA Region 9, Superfund Division. Supervisor: Will Duncan.
Salary: GS-13, 40 hrs/week

5/20/13 – 8/1/14 **Site Assessment Manager under CERCLA §104 and
Project Officer for CERCLA §128 & 311 projects (concurrent)**
US EPA Region 9, Superfund Division. Supervisor: Nicole Moutoux.
Salary: GS-12, 40 hrs/week

7/10/05 – 5/20/13 **Enforcement Officer for CWA §311, 402 & 404, Project Officer for CWA
§319 programs; Forestry Lead; and Tribal/EJ Liaison (concurrent)**
US EPA Region 9, Water Division. Supervisor: Sam Ziegler.
Salary: GS-12, 40 hrs/week

6/1/02- 6/25/05 **Watershed Technician, Watershed Management Division**
SF Bay Regional Water Quality Control Board. Supervisor: Leslie Ferguson.
Salary: \$9.70/hr, 20-30 hrs/week

EDUCATION AND TRAINING

SAN FRANCISCO STATE UNIVERSITY	SAN FRANCISCO, CALIFORNIA
<i>B.S. in Environmental Studies: Natural Resource Management and Conservation</i>	<i>January 2005</i>
<i>B.A. in Geography: Watershed Assessment</i>	<i>May 2005</i>

PROFESSIONAL AND ACADEMIC HONORS:

Special Achievement in GIS ([SAG Award](#)) for culturally-appropriate [Storymap](#) (tribal client), 2022.
EPA Silver Medal for CWA §404 and 402 settlement, requiring 122 acres of [stream restoration](#), 2009.
Summa Cum Laude, Major GPA: 3.93/4.0 (Double Baccalaureate)
Phi Beta Kappa, May 2004

CERTIFICATIONS:

Wetland Delineation for Section 404 Regulatory Program (Army Corps Reg IV)
Project Officer, Interagency Agreements
Contracting Officer's Representative

TECHNICAL PAPERS AND REPORTS:

Co-author of Assessing Dungeness River Functionality and Effectiveness of Best Management Practices (BMPs) Using an Ecological Functional Approach (October 2019) ([pdf](#)).
Co-author of EPA Report Investigating Impacts of Future Scenarios on Runoff and Sediment Yield (June 2013) ([EPA/600/R-13/074 and ARS/294076](#)) and associated data browser of seamless digital land cover, elevation, and hydrographic datasets (July 2012) ([EPA/600/R-12/550](#)).

TECHNICAL ADVISORY COMMITTEES (BY INVITATION):

Restoration Committee Chair, [Friends of Tryon Creek](#) (2022)
[Landscape Profile Tool](#) and [Wetland and Riparian Area Protection Policy](#) (2010 - 2013)



QUALIFICATIONS SUMMARY

Law school graduate, Professional Geologist and published scientific and legal author with legal training and relevant experience in most state and federal environmental laws, interrelated experience and legal courses and/or training in environmental, property, contract and insurance laws, and over a decade of client focused work experience in private and public sectors.

EXPERIENCE SUMMARY

ATTORNEY CASE MANAGER/“FIXER” (2021 to 2022); **LOAN PROCESSOR** (2006).

U.S. Small Business Administration. I approved insurance and business resolution documents (Post Compliance), processed change of address documents (Returned Mail), reviewed collateral and vesting documents for loans over \$500,000 (Legal Sufficiency) and “fixed” any and all errors prior to authorizing re-disbursements (Advance Returns). I also identified suspected fraud and drafted Memoranda recommending a referral with a 90% approval rate. As a Mentor, I assisted new employees with interpretation of the disaster loan programs’ laws, regulations, policies, and SOPs.

FIELD SUPERVISOR (2020); **ENUMERATOR** (2009). U.S. Census Bureau. Supervised Enumerators by conducting field observations and approved timesheets and expenses. Facilitated group training sessions using Census Bureau training guides and materials. Monitored the progress and performance of staff to ensure training and daily assignments were completed and resolved alerts (notices of potential issues). Provided assistance to Managers to improve performance and quality metrics. Documented termination process of poor performing employees. Coordinated collection of equipment.

SENIOR PROJECT MANAGER. Enviropro Services. (2011 to 2015). All phases of UST compliance, LUST investigations and corrective actions including: Multi-Phase Extraction (MPE), Air Sparge/Soil Vapor Extraction and ISCO/surfactant methodologies. Managed 50+ projects from two former project managers funded under the GUST Trust Fund with a combined yearly budget of over \$2 million, with over 95% of incurred costs reimbursed.

SENIOR HYDROGEOLOGIST. Mercuri Associates (2009 to 2010). Provided general litigation support including examining and drafting rebuttal documents prepared by experts related to litigation strategy and prepared effective mediation and trial exhibits to facilitate environmental liability resolution of a LUST site in New Jersey.

PROJECT GEOLOGIST. Delta Environmental Consultants, Inc. (1997 to 1999 & 2001). Prepared human health risk assessments in accordance with U.S. EPA and ASTM methodologies in Georgia, Kentucky, Ohio, Indiana, Illinois, Virginia and West Virginia for facilities regulated under RCRA, CERCLA and HSRA; developed screening criteria and/or peer reviewed assessments in California, Pennsylvania and West Virginia.

SENIOR GEOLOGIST. Georgia Environmental Protection Division (1992 to 1997 & 1999). Water Resources Branch (1999). Reviewed municipal and industrial permit applications to withdraw groundwater; assisted River Basin Management Program for the evaluation of appropriate management strategies. Land Protection Branch, Underground Storage Tank Program. (1994 to 1997). Developed and supervised a Request for Proposal for groundwater computer modeling guidance. Reviewed Corrective Action Plans for USTs. Supervised fate-and-transport modeling efforts; compiled a groundwater modeling database. Solid Waste Management (1993 to 1994). Provided technical and administrative assistance coordinating Georgia EPD and local municipality activities with the Department of Community Affairs arising under the Solid Waste Management Act. Geologic Survey Branch (1992 to 1993). Sampled over 800 wells; provided technical support to the Water Resources Branch Groundwater Management Program.

PART-TIME / CONTRACT

TECHNICAL REPORT WRITER. Ben Turnipseed Engineers (Part-time/2008). Researched and compiled economic and demographic data in support of economic feasibility studies for expansion of several wastewater treatment plants.

TECHNICAL ADVISOR. (Contract/2003). Land developer received an Administrative Order issued under Georgia's Hazardous Site Response Act to remove hazardous compounds from property purchased after a No Further Action. Presented the client's case to an environmental attorney, who along with co-counsel from an Atlanta-based public interest firm, agreed to represent the client on a pro-bono basis to challenge the Order. This resulted in EPD's recognition of the owner's innocent landowner defense and withdrawal of the Order—without administrative or judicial proceedings.

SENIOR GEOLOGIST. Moreland Altobelli Associates (Part-time/2002). Prepared solid waste handling permits, post-closure care plans, and groundwater monitoring and corrective action plans for local municipalities. Submitted the first "Request for Release from Post-Closure Care Liability" under Chapter 391-3-4 Rules for Solid Waste Management. The sixty-page report, reinforced with over three hundred pages of supporting documentation, evaluated scientific, legal and policy criteria for liability release.

VOLUNTEER EXPERIENCE

COURT APPOINTED SPECIAL ADVOCATE (2000 to 2005). Court Appointed Special Advocate for the interests of abused and neglected children. I attended court hearings and provided oral and written recommendations to the presiding juvenile court judge, the Assistant State Attorneys General, and the Department of Family and Children Services.

GEORGIA SCIENCE & ENGINEERING FAIR COORDINATOR/JUDGE (1992 to 1997 & 1999). Developed and served as EPD's Georgia Science and Engineering Fair Coordinator. Created EPD's Environmental Achievement Award and "A-Day as an EPD Associate". Served as a judge for local, regional and state.

EDUCATION

Juris Doctor (2003). John Marshall Law School. Courses included Environmental Law and Insurance Law taught by prominent AV-rated defense attorneys. “Who’s Who Among Students in American Universities & Colleges.”

Georgia State University, Center For Hydrogeology Studies, Atlanta, Georgia. (1993 to 1996). Graduate level courses included: Geology of Fractured Rock, Hydrogeology, Water Well Hydraulics and Bioremediation.

Bachelor of Science (1992). Geology. State University at West Georgia.

COMPUTER SKILLS

- Windows and Mac operating systems
- RAGS & RBCA Human Health Risk Assessment Computer Based Methodologies
- Various fate-and-transport analytical models (air, soil, and groundwater)
- Geographic Information System databases and viewing software: MapInfo & ArcView II
- GPS systems and data processing programs: Magellan and Trimble Navigation
- Fracture trace analysis software: ROCKWARE
- Geostatistical Applications: GEO-EAS and GRITS and GRITSTAT

LICENSES & CERTIFICATIONS

- Professional Geologist License No. 1511
- 40 Hours OSHA HAZWOPER & 8 Hours HAZWOPER Refresher Course
- ASTM Phase I / Phase II Environmental Site Assessments, EDR’s Professional Development Institute, Sorting Out the Implications of U.S. EPA Vapor Intrusion Guidance and Revisions to the ASTM E 1527 Standard: Three Insiders’ Perspectives
- GTEC Annual Risk Assessment & Remediation Seminar
- SRRA / LSRP Training Session - SRRA Overview for LSRP, NJDEP
- National Conference of Bar Examiners, MPRE
- Risk Communications and Public Involvement. U.S. EPA Region 9
- Risk Based Corrective Action (ASTM) Modules I, II, and III, U.S. EPA, OUST
- Practical Use of Models for Assessment and Remediation of NAPL Contamination
- Underground Storage Tank Management, Georgia Institute Of Technology
- Field Screening Water and Soil for Volatile Organics. University Of Tennessee
- Geostatistics: Environmental Applications, Georgia Institute Of Technology
- Statistical Analysis of Ground-Water Monitoring Data: GRITS and GRITSTATS. U.S. EPA Workshop Series. Clayton State College
- Landfill Operator Certification RCRA Subtitle “D” SWANA Certificate No. 507

ACCOMPLISHMENTS

- ✓ Served as EPD's Land Protection Branch Geographic Information Systems Coordinator.
- ✓ Appointed to Interagency Spatial Information Team as GIS Specialist for the EPD working with various governmental agencies including: Georgia DCA USGS, GEMA, FEMA, Georgia DOT, NWS, USFC, GFC, SCS, ERDAS and private industry coordinating Global Positioning Satellite data for flood boundaries.
- ✓ Worked with the Georgia Department of Community Affairs and representatives from the Georgia Legislature compiling a GIS database to address Environmental Justice concerns prior to amending Georgia's Solid Waste Management Act.

PEER REVIEWED LEGAL AND SCIENTIFIC PUBLICATIONS

1. *The Select Steel Analytic Shortcut: Using an Outcome-Predictive Analytic Model to Expose the Flaws of the Select Steel Approach to Title VI Enforcement.* 25 N.C. CENT. L. J. 1 – 65. (lead article). Citations include: David Schelly & Paul B. Stretesky, *An Analysis of the "Path of Least Resistance" Argument in Three Environmental Justice Success Cases*, SOC. OF NATURAL RESOURCES: AN INTERNATIONAL J., VOL. 22, ISSUE 4, 2009.
2. Chambers, J.G., C.L. Hollabaugh, P.L. Gertenbach, A.G. Wood and G.M. York, 1992, *Nitrate, pH, and total Ca^{2+} - Mg^{2+} monitoring of the Little Tallapoosa River, Carroll County, Georgia.* GEORGIA JOURNAL OF SCIENCE. 50, p. 146-159. John G. Chambers and Gina M. York, 1992, *Nitrate, pH, temperature, and total Ca^{2+} - Mg^{2+} monitoring of the Little Tallapoosa River and Tributaries.* Sigma Xi Winner of Best Student Paper.
3. Hollabaugh, C.L., K.N. Beery, C.A. Crews, G.M. York, P.L. Gertenbach and A.G. Wood, 1994, *Nitrate and pH levels of Carrollton, Georgia, Surface Waters.* GEORGIA JOURNAL OF SCIENCE. 52, p. 161-172.

PAPERS & PRESENTATIONS

1. *Risk-Based Approaches to Closure in Georgia, Kentucky, Ohio, and West Virginia.* Atlanta Geological Society Guest Speaker.
2. *Project Impact.* Georgia Department of Natural Resources, Environmental Protection Division's response to EPA's audit summarizing environmental impact to aquifers from leaking underground storage tanks.
3. *Geographic Information Systems: Policies and Implementation Schedule.* Georgia Department of Natural Resources, Environmental Protection Division.
4. *Applications and Limitations to Fractured Rock Modeling.* Submitted as a requirement for receiving an OSWER / U.S. EPA Hazardous and Solid Waste Fellowship Award.
5. *GPS Comparison Analysis and Potential Uses for Delineating High Water Marks Along River Basins.* Georgia Ground Water Association. Technical Presentation.



EDUCATION

M.S. Fisheries Biology & GIS Certificate Iowa State University, Ames, Iowa Thesis: <i>Geospatial methods for aquatic conservation: Topeka Shiner restoration site selection and the development of an Iowa watershed health assessment</i>	2018
B.A. Biology with specialization in Ecology and Conservation & Minor in Earth Science Boston University, Boston, Massachusetts	2013

CERTIFICATIONS

- GIS Professional Certification #161360
- Heartsaver First Aid CPR AED certified
- NAUI Master Scuba Diver

WORK EXPERIENCE

Natural Resources Specialist III: Spatial Information Analyst Oregon Department of Fish and Wildlife (ODFW), Corvallis Research Lab, Corvallis, OR.	5/1/2022 – now / (40 hrs/week) / (~\$65,000/yr)
<ul style="list-style-type: none">• Principal Investigator for a USFW Sports Fish Restoration project to develop novel methods to improve forecasting of Coho salmon and steelhead returns and the evaluation of salmonid habitat in Oregon• Obtain and collate remotely sensed geospatial data to be used in a fish habitat model• Provide technical support for ODFW's Fish Research, Evaluation, Data and Decision Support (REDD) group to support the state's fisheries management and its advancement of departmental policies• Collaborate with the Oregon Water Resources Division (OWRD) to identify areas in need of water protection programs for the Oregon Aquatic Habitat Prioritization• Perform technical and advisory work for the Oregon Water Resources Division to solve problems related to geospatial data analysis and generation	
Natural Resources Specialist II: Spatial Information Analyst Oregon Department of Fish and Wildlife (ODFW), Corvallis Research Lab, Corvallis, OR.	7/23/18 – 5/1/22 / (40 hrs/week) / (~\$50,000/yr)
<ul style="list-style-type: none">• Served as the PI and completed an ODFW-ODOT collaborative effort to develop an ArcPro toolbox to support early prediction of native migratory fish presence at small Oregon culverts• Delivered written full and quick technical guides and reports for implementing and troubleshooting custom ESRI ArcPro toolbox• Conduct Species Distribution Models (SDMs) for salmonids and other Oregon Native Migratory Fishes to support ODFW multispecies management plans and ODOT culvert scoping efforts• Implement and evaluate the Environmental Protection Agency (EPA) spatially distributed, ecohydrological model, Visualization Ecosystems for Land Management Assessments (VELMA), in Oregon coastal watersheds to predict the effects of future climate and habitat conditions on aquatic resources• Provide technical support for ODFW's Fish Research, Evaluation, Data and Decision Support (REDD) group to support the state's fisheries management and its advancement of departmental policies• Gather, analyze, visualize, and communicate data and results to support ODFW's Statewide Aquatic Habitat Prioritization• Coordinate access and exchange of interagency spatial data files necessary for REDD modeling efforts• Write technical reports and prepare presentations to communicate progress and results to a variety of audiences• Create custom, user-friendly ArcGIS toolboxes to allow data processing and visualization• Develop Python and R-based spatial tools for the REDD group, the ODFW science program, and partners	
Private GIS Contractor	
<ul style="list-style-type: none">• Provide customized assistance and seminars on the use of ArcGIS, ArcPro, Excel, and R to the Sitka Tribe of Alaska to process shellfish data	
Graduate Research Assistant Department of Natural Resource Ecology and Management, Iowa State University, IA	1/1/16 - 5/4/18 / (40-60 hrs/week) / (~\$24,000/yr)
Collaborated with governmental and non-governmental agencies to support conservation planning	
<ul style="list-style-type: none">• Worked collaboratively with federal and state government agencies and non-profit organizations to support conservation planning for a federally listed endangered fish species to ensure preservation, protection, and enhancement of its habitat	

- Integrated species distribution models, potential restoration locations, satellite imagery, and public land data to prioritize ecologically effective and economically efficient sites
- Provided GIS technical and analytical best practice expertise to departmental staff and faculty
- Presented research findings at diverse venues to academic, governmental, and public audiences
- Authored numerous technical and non-technical reports for federal, state, and public review
- Created a Microsoft Access relational database to store complex biological, habitat, and GIS data
- Conducted landscape scale spatial analysis of aquatic systems with ArcGIS to characterize hydrological processes
- Processed and hydro-corrected LiDAR derived Digital Elevation Models (DEMS) to generate 6,000km of accurate stream flow
- Compiled and analyzed large spatial datasets from various sources to create a Watershed Health Assessment for Iowa to map 27 indices of watershed health for 389 HUC 10 watersheds across the state
- Developed an innovative ArcGIS toolbox using Python coding language to automate location of historical stream meanders
- Trained and supervised technicians in ArcGIS data creation, editing, and analysis

Biologist I/II

9/1/13 - 1/1/16 / (40-80 hrs/wk) / (~\$32,000 per year)

Louisiana Department of Wildlife and Fisheries (LDWF), Grand Isle, LA Chief Scientist for LDWF's portion of the Southeast Area Monitoring and Assessment Program (SEAMAP) Plankton Survey Project

- Responsible for planning, budgeting, organizing, and executing multiday offshore fisheries data collection
- Coordinated sample transfers to the National Marine Fisheries Service (NMFS)
- Supported the Environmental Protection Agency's (EPA) 2015 National Coastal Conditions Assessment
- Responded to federally protected marine mammal and federally endangered sea turtle stranding events
- Published maps for both research cruise planning and reporting using ESRI ArcGIS 10.x software
- Supervised biologists and volunteers during field fisheries data collection, sometimes during adverse conditions
- Authored reports for state, federal, and public review
- Conducted entry and QA/QC of fisheries data in state and federal databases
- Operated CTDs, YSIs, and sondes to collect water quality data
- Processed and analyzed chlorophyll samples in laboratory setting
- Conducted dockside CREEL surveys
- Implemented diverse fisheries survey methods to support both state and federal assessment and monitoring projects including:
 - **SEAMAP Plankton Survey**
 - **SEAMAP Groundfish Survey**
 - **SEAMAP Vertical Line Survey**
 - **SEAMAP Bottom Longline Survey**
 - **Red Drum Project**
 - **Artificial Reef Dive Survey**

Boston University GIS Student

2012 - 2013

Boston University Earth and Environment Department, Boston University, Boston, MA.

- Developed land cover change maps of Broadmoor Wildlife Sanctuary, MA using ESRI ArcGIS software
- Added maps to digital archives to support the "Audubon Project" at Boston University
- Presented work at the Massachusetts Audubon Society Natural History Conference

Marine Biogeochemistry Research Intern

2010 - 2013

Fulweiler Marine Biogeochemistry Laboratory, Boston University, Boston, MA.

- Responsible for the organization and processing of numerous sediment cores and vegetation samples from New England wetlands to be analysed for nutrient concentration

Fish and Invertebrate Zoological Operations Intern

2012

Georgia Aquarium, Inc., Atlanta, GA.

- Performed general animal care and habitat maintenance of aquatic and marine fish and invertebrates
- Observed behaviours and made decisions for care based on observations
- Maintained health records and water quality

Environmental Camp Counselor/Educator

2009, 2010, 2012

Camp Kingfisher, Chattahoochee Nature Center, Roswell, GA.

- Developed unique and engaging educational programs for campers aged 7-11 about Southeastern, USA natural ecology and environmental issues focusing on Georgia's diverse ecosystems

SELECTED ORAL PRESENTATIONS AND POSTERS (7 OF 16)

2022 – "Early Predication Method for Native Migratory Fish Presence at Small Culverts." *Oral Presentation*. Oregon American Fisheries Society, Virtual

- 2019 – “The Implementation of Ecohydrological Models to Support Forward-thinking Fisheries Restoration and Conservation Planning in Oregon.” *Oral Presentation*. Oregon American Fisheries Society, Bend, OR.
- 2018 – “Geospatial methods for aquatic conservation: Topeka Shiner restoration site selection and the development of an Iowa watershed health assessment.” *M.S Oral Thesis Defense*. Iowa State University, Ames, IA.
- 2018 – “Integrating LiDAR Landscape Analysis and Species Distribution Models to Prioritize Areas for Oxbow Restoration.” *Oral Presentation*. Iowa Water Conference. Ames, IA.
- 2017 – “Off-Channel Mapping for Identifying and Prioritizing Topeka Shiner Restoration Sites.” *Oral Presentation*. Society for Conservation GIS Meeting, Monterey, CA.
- 2017 – “Use of Geospatial Technology in Restoration Ecology.” *Oral Presentation*. IA Coop Unit Annual Meeting, Ames, IA.
- 2017 – “Exploratory Use of Side Scan Sonar to Map a Small Iowa River.” *Oral Presentation*. Ames Anglers Meeting, Ames, IA.
- 2017 – “The Creation of Iowa’s own Watershed Health Assessment Framework to Guide Oxbow Restoration in Iowa for the Conservation of the Topeka Shiner.” *Poster Presentation*. Iowa AFS Chapter Meeting, Ames, IA.

PEER-REVIEWED PUBLICATIONS

- Pierce, C.L., Simpson, N.T. Simpson, Bybel, A.P., [REDACTED] Weber, M.J., and Roe, K.J. 2019. Status of the Topeka Shiner in Iowa. *The American Midland Naturalist*, 182:109-117. doi: 10.1674/0003-0031-182.1.109
- [REDACTED] Ellis, H., Pierce, C.L., Roe, K.J., Weber, M.J., Schilling, K.E., and Young, N.C. 2019. The Development of a GIS Methodology to Identify Oxbows and Former Stream Meanders from LIDAR-Derived Digital Elevation Models. *Remote Sensing* 11, 12. doi: 10.3390/rs11010012

SELECTED PUBLISHED REPORTS AND GRAY LITERATURE

- [REDACTED] 2018. Geospatial methods for aquatic conservation: Topeka Shiner restoration site selection and the development of an Iowa watershed health assessment. *M.S Thesis*.
- Bybel, A., [REDACTED] and Simpson, N.A. 2017. Three-pronged approach to Topeka Shiner Research. *Iowa AFS Newsletter*, 36, 18-19.
- [REDACTED], Bybel, A.P, Pierce, C.L., Roe, K.J., and Weber, M.J. 2017. Habitat Improvement Projects for Stream and Oxbow Fish of Greatest Conservation Need. *Annual Progress Report*.
- Simpson, N., Bybel, A., and [REDACTED] Topeka Shiner Research in Iowa. 2017. *Article in Getting into Soil and Water*.
- Bybel, A.P. [REDACTED], Pierce, C.L., Roe, K.J., and Weber, M.J. 2016. Habitat Improvement Projects for Stream and Oxbow Fish of Greatest Conservation Need. *Annual Progress Report*.
- [REDACTED]. Louisiana Spring 2015 SEAMAP Plankton Survey Cruise Report. *Annual Progress Report*.
- [REDACTED] Louisiana Fall 2014 SEAMAP Plankton Survey Cruise Report. *Annual Progress Report*.

RELEVANT TRAINING/WORKSHOPS

- 2022 – Oregon State University Fish and Wildlife 544 Quantitative Decision Analysis for Fish and Wildlife Management
- 2021 – Oregon State University Fish and Wildlife 505 Estimation Primer Class
- 2020 – VELMA Training Workshop
- 2019 – Hydraulic Analysis using HEC-RAS 2D
- 2017 – An Introduction to Mobile Field Data Collection in ArcGIS, *Monterey, CA*.
- 2017 – An Introduction to Species Distribution Modelling in the Marine Environment, *Monterey, CA*.
- 2016 – Database Concepts, Design, and Application in Fisheries Management, *Iowa State University, Ames, IA*.
- 2016 – GIS Applications in Aquatic Ecology and Evolutionary Biology Workshop, *St. Louis University, St. Louis, MO*.
- 2016 – USDA Agricultural Conservation Planning Framework (ACPF) Training Workshop, *Iowa State University, IA*.

TEACHING

- Fisheries Management Lab** (2017) *Iowa State University, IA*.
- Basic Map Making in ArcGIS** (2016) *Iowa State Graduate Student Organization Brown Bag Seminar, Iowa State University, IA*.

GRANTS AND AWARDS RECEIVED

- 2017 – Best Student Poster, Iowa Chapter of the American Fisheries Society, Iowa
- 2017 – Graduate and Professional Student Senate Professional Advancement Grant, Iowa State University
- 2017 – Iowa Natural Heritage Foundation J.N. "Ding" Darling Scholarship
- 2017 – Dr. Keith McNurlen Award
- 2017 – Elaine Boge Scholarship
- 2016 – Graduate and Professional Student Senate Professional Advancement Grant, Iowa State University

2013 – Undergraduate Research Opportunities Program Grant, Boston University

“*Mapping Biogenic silica in above-ground woody biomass in the Northeast Region of the United States*”

2012 – Undergraduate Research Opportunities Program Grant, Boston University

“*Marine Sediment Biogenic Silica as a Tool for Understanding Climate Change in a New England Estuary*”

OUTREACH AND VOLUNTEER ACTIVITIES

Editor in Chief of *Field Notes Volume 8* (2016-2017) *Department of Natural Resource Ecology and Management, Iowa State University, IA.*

- Lead a committee of graduate students in the collection, editing, organizing, and publishing an annual publication for the Department of Natural Resource Ecology and Management at Iowa State University

Seminar Fisheries Committee Chair (2016-2017) *Department of Natural Resource Ecology and Management, Iowa State University, IA.*

- Invited, organized, and hosted fisheries seminar speakers to attend the Department of Natural Resource Ecology and Management Seminar Series

Prairie Restoration Volunteer (2016) *Iowa Natural Heritage Foundation (INHF), Pilot Mound, IA.*

- Applied herbicide and manually removed invasive and non-native vegetation from hillside prairies

[REDACTED]
[REDACTED]
[REDACTED]
Fully vaccinated against COVID-19

EDUCATION

Western Washington University Bellingham, WA United States

Master's Degree 03/2008 **GPA:** 3.76 of a maximum 4.0

Major: Environmental Science, Emphasis in Marine and Estuarine Science

Relevant Coursework, Licenses and Certifications:

M.S. Thesis: Effects of Cadmium on the Growth and Photosynthesis of Two Species of Marine Phytoplankton and Trophic Transfer to a Ciliate Grazer

Coursework: Estuarine Ecology, Biological Oceanography, Environmental Toxicology, Fish Ecology, Climate Change, and Statistical Methods.

Teaching Assistant

Assisted in instructing Fish Capture Techniques class, including intertidal field work

Taught Biology 101 laboratory classes

Pacific Lutheran University Tacoma, WA United States

Bachelor's Degree 12/2000

GPA: 3.6 of a maximum 4.0

Major: Biology and English **Minor:** Publishing and Printing Arts

Relevant Coursework, Licenses and Certifications:

Senior thesis: Literature review of the Ecological Effects of the Exxon Valdez Oil Spill

Coursework: Ecology, Ecological Field Methods, Biological Oceanography, Technical Writing

WORK EXPERIENCE

Alaska Department of Transportation

4111 Aviation Avenue, Anchorage, AK 99519 United States

07/2018 - Present **Hours per week:** 37.5

Environmental Impact Analyst I (equivalent to GS-07) **7/2018 to 8/2019** **\$46,000/yr**

Environmental Impact Analyst II (equivalent to GS-09) **8/2019 to 10/2020** **\$54,000/yr**

Environmental Impact Analyst III (equivalent to GS-11) **10/2020 to present** **\$66,000/yr**

Supervisor: Ryan Riddle (907)269-0545

Okay to contact this Supervisor: Yes

Duties, Accomplishments and Related Skills:

PLANNING AND CARRYING OUT ASSIGNMENTS, RESOLVING CONFLICTS AS THEY ARISE, COORDINATING THE WORK WITH OTHERS, INTERPRETING POLICY, AND EFFECTIVELY MEETING REQUIREMENTS OR EXPECTED RESULTS

- Developed and reviewed Categorical Exclusions (CE), Environmental Assessments (EA), and supporting documents for highway and airport projects in accordance with the National Environmental Policy Act

(NEPA). Impacts were analyzed in accordance with federal laws including the Endangered Species Act, Clean Water Act, Marine Mammal Protection Act, Fish and Wildlife Coordination Act, Oil Pollution Act and Comprehensive Environmental Response, Compensation, and Liability Act

- Coordinated communication among personnel from DOT&PF, other agencies, consultants, and the public throughout project design, review, and construction
- Reviewed project designs during development to determine environmental requirements and advise project management on required permits, consultations, and mitigation
- Recognized potential concerns over sensitive resources and public controversy, and elevated those concerns and recommendations to management
- Currently training and supervising an Environmental Impact Analyst I on NEPA and permitting procedures as well as department policies and document management systems
- Participated and led site visits, wetland delineations and other fieldwork
- Wrote reports (with figures, maps, and photos) for wetland delineations, eagle nest surveys, and site visits.
- Synthesized information on contamination, near shore coastal ecosystems, wetlands, rivers, fish habitat, wildlife, endangered species, critical habitat areas, floodplains, socioeconomics, recreational facilities, cultural resources, and historical sites.
- Prepared agency scoping packages including descriptions of project design and summaries of available information on potential impacts.
- Prepared permit application materials for U.S. Army Corps of Engineers (USACE), Alaska Department of Fish and Game (ADF&G) Fish Habitat permits, the multi-agency Kenai River Center, and various local governments.
- Consulted with subject matter experts at state and federal agencies to evaluate impacts and develop mitigation strategies.

State of Alaska Public Health

5455 Dr. Martin Luther King Jr. Ave Anchorage, AK 99507 United States

09/2015 - 07/2018 Hours per week: 37.5 \$42,000/yr

Laboratory Technician

Duties, Accomplishments and Related Skills:

Paraprofessional microbiology lab support: Received and documented specimens using appropriate biosafety and security measures. Prepared specimens for biological testing. Prepared media and reagents for biological testing. Maintained and calibrated laboratory equipment. Performed quality control on equipment, media, and reagents. Assisted microbiologists in performing established, standardized tests and analyses on a broad range of biological samples.

Anchorage Parks and Recreation

1600 Lidia Selkregg Ln, Anchorage, AK 99504 United States

06/2014 - 08/2015 Hours per week: 38 \$16/hr
Recreation Specialist Summer camp leader, Nordic ski instructor, and outdoor program support

Duties, Accomplishments and Related Skills:

Developed curriculum and led outdoor education summer camp activities for ages 6-12. Taught Nordic ski lessons to children and adults. Assisted in planning, advertising, and carrying out other outdoor recreation programs in Municipality of Anchorage Parks. Provided parks and trails information and processed facility rentals.

Lumen Christi High School

8110 Jewel Lake Rd., Anchorage, AK 99502 United States

08/2013 - 06/2014 Hours per week: 60 \$35,000/ 10 month contract

Teacher and Track Coach

Duties, Accomplishments and Related Skills:

Taught math, biology, life science, English, and health classes for 7-12 grade. Coached Track and Field for 6-12 grade.

Alaska Community Action on Toxics

1225 E. International Airport Rd., Ste 200 Anchorage, AK 99518 United States

09/2011 - 08/2013 Hours per week: 40 \$45,000/yr

Environmental Health Coordinator (equivalent to GS-11)

Supervisor: Pam Miller (907)222-7714

Okay to contact this Supervisor: Yes

Duties, Accomplishments and Related Skills:

PLANNING AND CARRYING OUT ASSIGNMENTS, RESOLVING CONFLICTS AS THEY ARISE, COORDINATING THE WORK WITH OTHERS, INTERPRETING POLICY, AND EFFECTIVELY MEETING REQUIREMENTS OR EXPECTED RESULTS

- Coordinated community strategies to advocate for clean air, clean water, and clean food
- Reviewed and wrote extensive, detailed comments on permit applications, Health Impact Assessments, and NEPA scoping documents for proposed coal and hard rock mining projects. These written comments identified data gaps and provided additional information on environmental and health impacts.
- Maintained partnerships with a diverse coalition of private landowners, nonprofit advocacy groups, and Alaska Native Tribes to constructively address environmental permitting processes for coal and hard-rock mining.
- Wrote and edited newsletters, grant reports, website content, action alerts, talking points, oral public testimony, written public comments, petitions to decision- makers, and event flyers.
- Delivered factual presentations to the public on the environmental health effects of mining and of endocrine-disrupting chemicals in personal care products.
- Independently designed and conducted an ecological monitoring project on air quality in Seward, including data management, data analysis, and producing a written report.

- Planned travel logistics, emergency procedures, and worked as part of a field crew conducting water quality measurements, sediment sampling, freshwater fish trapping, and biological specimen processing on remote coastal sites on St. Lawrence Island.

Alaska Department of Fish and Game

333 Raspberry Rd., Anchorage, AK 99518 United States

08/2010 - 09/2011 Hours per week: 37.5 \$37,000/yr

Habitat Biologist

Supervisor: Dave Ryland (9072672341)

Okay to contact this Supervisor: Yes

Duties, Accomplishments and Related Skills:

- Reviewed land use permit applications submitted to the Alaska Department of Natural Resources, and wrote comments addressing fish and wildlife concerns.
- Researched the historical uses of potentially navigable waterways, using reports, GIS maps, land title plats, and other documents from various federal and state agencies. Wrote over 20 reports describing the geographic extent and land ownership patterns along rivers

BGES, Inc

1042 E. 6th Ave., Anchorage, AK 99501 United States

10/2009 - 08/2010 Hours per week: 40

Environmental Scientist

Duties, Accomplishments and Related Skills:

- Collected soil and groundwater samples in accordance with established, standardized procedures, and delivered samples for standard laboratory analysis of contaminants. Compiled laboratory results and incorporated the data into written reports.
- Researched and compiled information on land use, environmental conditions, and contamination history for Phase I Environmental Site Assessments. Data gathering methods included site visits, communication with landowners, various databases, and both current and historic maps and aerial photos. Impacts were analyzed in accordance with federal laws including the Clean Water Act, Clean Air Act, Oil Pollution Act and Comprehensive Environmental Response, Compensation, and Liability Act.
- Prepared and delivered more than 25 Phase I ESA reports following ASTM standards. All work was planned and carried out independently in accordance with proven techniques, methods, and practices.

Alaska Department of Fish and Game

333 Raspberry Rd., Anchorage, AK 99518 United States

06/2008 - 09/2009 Hours per week: 37.5 \$36,000/yr

Habitat Biologist (equivalent to GS-9)

Supervisor: Dave Ryland (907) 267-2341

Okay to contact this Supervisor: Yes

Duties, Accomplishments and Related Skills:

PLANNING AND CARRYING OUT ASSIGNMENTS, RESOLVING CONFLICTS AS THEY ARISE, COORDINATING THE WORK WITH OTHERS, INTERPRETING POLICY, AND EFFECTIVELY MEETING REQUIREMENTS OR EXPECTED RESULTS

- Planned and executed hydrological assessments of culverts to evaluate potential fish passage using standard surveying equipment to measure culverts and stream channel profiles to classify fish habitat. Trapped and identified resident and anadromous fish at all life stages.
- Coordinated work and shared results with non profits, the Municipality of Anchorage, and other federal and state agencies. In particular, my collaboration with the municipality directly resulted in several culvert replacements using 2009 federal stimulus funding for “shovel-ready” projects.
- Assisted with other habitat restoration projects and attended workshops and conferences on stream bank restoration, trails, and aquatic resource management.
- Compiled data and wrote formal reports (including literature reviews) summarizing the study results.
- Used an MS Access database to compile and analyze culvert survey measurements from several field seasons (including data collected by others). Used the Fish Xing program for hydrologic modeling of a subset data to further evaluate more complicated sites. Managed related data sets using ArcGIS, Access, and Excel
- Created maps to use for field work, and for coordinating work with other agencies
- Planned all logistics for culvert survey project, including scheduling, lodging, equipment purchase, and planning daily, weekly, and monthly work loads
- Assisted in hiring seasonal technician. Led small crews of technicians in daily fieldwork.
- Wrote interim progress reports and presented data as needed for grant reporting and work coordination with other agencies.

U.S. Fish and Wildlife Service

1011 E. Tudor Rd., Ste 200 Anchorage, AK 99503 United States

05/2003 - 08/2003

Series: 0404 Pay Plan: GS Grade: 5

05/2004 - 08/2004

Hours per week: 40

05/2005 - 08/2005

Biological Science Technician GS-0404-05 (This is a federal job)

Duties, Accomplishments and Related Skills:

- Three field seasons assisting in all aspects of planning, logistics, field work, data collection, and data management for the Alaska portion of a national Malformed Amphibians Monitoring Program on Kenai and Tetlin National Wildlife Refuges. Operated motorized skiffs and canoes on freshwater lakes on the Kenai Peninsula.

- My crew leader duties included training new technicians on biological study protocols as well as Leave No Trace camping techniques for working in Wilderness areas. Conducted training on frog collection for biologists and volunteers in Innoko NWR and Yukon Delta NWR.
- For a different project, participated in surveying and classifying fish habitat in Mat-Su Valley streams. Compiled data collected throughout the field season through both fish habitat and amphibian surveys, entered it in to a database and QC'd the results with the original field forms.

USDA Forest Service

2171 WY-130, Ryan Park, WY 82331 United States

06/2002 - 10/2002

Hours per week: 40

Series: 0404 **Pay Plan:** GS **Grade:** 5

Biological Science Technician (This is a federal job)

Duties, Accomplishments and Related Skills:

- Conducted biological studies using established procedures: field surveys for goshawk nests and hair snares for lynx.
- Additional Training: Type II Crew wild land fire fighter training



**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY**

Boise, ID United States

Series: 0028 Pay Plan: GS Grade: 12

10/2020-Present & 02/2004 - 06/2018

Hours per week: 40

ENVIRONMENTAL PROTECTION SPECIALIST (This is a federal job)

Duties, Accomplishments and Related Skills:

Tribal Consultation Specialist United States Environmental Protection Agency,
Region 10

Provide support for the successful development, implementation, and staff training on the EPA Region 10 Tribal Consultation and Coordination Procedures (2012). These Procedures were developed to successfully and respectfully implement EPA's Policy on Consultation and Coordination with Indian Tribes (2011).

Tribal Coordinator for all programs directly related to EPAs environmental and public health programs, including General Assistance Program, Clean Water Act (CWA)106,319, 104(b)3, and 404 for Tribes in the State of Idaho, Eastern Washington/Oregon & Bristol Bay Region of Alaska.

Project officer for financial assistance agreements.

Work with Tribes to establish quantitative and descriptive information regarding environmental conditions, identify and assess environmental problems, and develop work plans for programs under the CWA. Provide assistance in understanding program regulations, policies and procedures.(this includes CWA) Knowledge of statutes, regulations, licensing/permitting requirements, and precedent decisions governing environmental operations sufficient to use in planning, implementing, or monitoring environmental programs and services.(this includes CWA)Applied coordinative knowledge and skills to negotiate and solve problems.

Promote Wetland Program Development Grant (WDPG)CWA 104(b)3 funds to the Tribes Participate as a member of the WPDG grant review team
Outreach to tribes to develop wetland programs through trainings
Coordinate technical resources and support to tribes wanting to develop wetland programs.

Supervisor: Adam Baron 206-553-2106

Okay to contact this Supervisor: Yes

**UNITED STATES BUREAU OF
RECLAMATION
Boise, ID United States**

06/2018 - Present **Series: 0404**
Hours per week: 40 **Pay Plan: GS**
Biological Technician (This is a federal job) **Grade: 10**

Administered, land, and natural resource management assistance as its primary function and implemented of practices, policies, and procedures at Cascade and Deadwood Reservoirs, for the Middle Snake Field Office (MSFO). Issuance of use authorizations and resolution of trespass issues, as well as review and compliance with all resource protection considerations related to land action activities and implements policy, goals, and objectives for wetland protection, fisheries, and wildlife management. public contact, local coordination, minor facility maintenance, scheduling and participation in meetings, budgetary tracking, and supervision of a small staff.

Supervisor: Charles Dillon 208-383-2218
Okay to contact this Supervisor: Yes



Employer: Idaho Water resources (IDWR) **Dates Employed:**10/2004-3/2005

Salary: Beginning \$ 45,000/yr **Ending** \$ same

Title: Senior Water Rights Agent **Supervisor:** Jeff Peppersack
Telephone: 208 287-4800

Number of employees supervised: 0 **Grade or rank:** N/A **Reason for leaving:** Took new job with US EPA

Description of work: Conducted scientific field examinations to measure rate of water diversion and determine location, method, purpose and frequency of appropriation to establish extent of

beneficial use. Interpreted legal descriptions, survey plats, aerial photographs and maps to locate points of diversion and places of use. Evaluated new-use applications, amendments, transfers and adjudication claims pertaining to water appropriations and recommend appropriate action. Reviewed various department regulations for impact on natural resources, technical correctness, and compliance with state and federal laws and regulations and department policies.

United States Forest Service, Rocky Mountain Research Station 322 E. Front St. Boise, ID 83702 United States	Series: 1316 Pay Plan: Other Grade: 5 This a time-limited appointment or temporarily promotion
09/2002 - 10/2003 Salary: 19.00 USD Per Hour Hours per week: 40	

Hydrologic Technician (This is a federal job)
Duties, Accomplishments and Related Skills:
Member of the Geomorphic Road Assessment and Inventory Package (GRAIP) Project team. Collected field data and processed GIS information to be used to in the development of a user-friendly computerized survey and inventory system for analyzing the impacts of roads on forested watersheds. The information derived from GRAIP is used to predict road sediment production and delivery, mass wasting risk from gullies and landslides, and road hydrologic connectivity.
Member of a stream geomorphology survey team. Surveyed streams within the Frank Church Wilderness area, studying the effects of historical fires on stream geomorphology. Used Rosgen stream classification survey methods along with surveying riparian timber for recruitment potential and fire history through coring.
Supervisor: Tom Black (208-373-4363)
Okay to contact this Supervisor: Yes

UNITED STATES FISH & WILDLIFE SERVICE, WESTERN REGIONAL OFFICE NA, United States	Serie s: 1316 Pay Plan:
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05/2001 - 07/2002
Hours per week: 40

GS
Grade: 9

HYDROLOGIC TECHNICIAN (This is a federal job)

Duties, Accomplishments and Related Skills:

Assisted under the supervision of the Regional Engineer in the Engineering Division of the U.S. Fish and Wildlife Service, Western regional office. The Division provides planning, engineering, and specialized support to the Regions Fish and Wildlife Service missions in the states of Washington, Oregon, Idaho, California, Nevada, and the Pacific Islands. Responsible for the acquisition, perfection, and protection of Service water rights and for the provision of technical assistance related to hydraulics, hydrology, hydrogeology, and water chemistry.

Supervisor: Dave Langman ((503) 231-2057)

Okay to contact this Supervisor: Yes

SANTA ANA, DEPARTMENT OF NATURAL RESOURCES

Bernalillo, NM

09/1997 - 12/2000

Hours per week: 40

Watershed/Rangeland Program Manager

Duties, Accomplishments and Related Skills:

Managed all of the Pueblo's surface water and rangeland issues. Developed baseline stream geomorphic and riparian study to aide in the establishment of a future water quality study. Cooperatively designed a watershed/range inventory and improvement program for the Pueblo's grazing lands. Maintained extensive relations with other natural resource agencies, both state and federal.

Supervisor: Jon Cote ((508) 829-4477 ext 117)

Okay to contact this Supervisor: Yes

US FOREST SERVICE

Coeur d' Alene, ID

09/1996 - 09/1997

Salary: 13.50 USD Per Hour

Hours per week: 40

Series:
1316
Pay Plan:
GS
Grade: 6

Hydrologic Technician (This is a federal job)

Duties, Accomplishments and Related Skills:

Managed day to day operations of a diverse 3 person stream cross sectional survey crew for an entire field season. Surveyed and monumented cross section in order to create a baseline data base. Worked cooperatively with the hydrologist to develop hydraulic relationships of this database.

Responsible for the supervision, training and setting of work schedules of the road condition inventory crew for a road obliteration program of low volume roads in forested and mountainous watersheds. Crew surveyed road conditions, mass movement sites and surface erosion sites in order to return unneeded roads to natural resource production. Analyzed data to provide road density and problem site information for future management decisions.

Supervisor: Rob Harper (406-822-4233)

Okay to contact this Supervisor: Yes

US FOREST SERVICE

Craig, AK United States

03/1996 - 09/1996

Salary: 12.50 USD Per Hour

Hours per week: 40

Serie

s:

0404

Pay

Plan:

GS

Grad

e: 5

Fisheries Technician (This is a federal job)

Duties, Accomplishments and Related Skills:

Understand the habitat requirements, movements, and growth of juvenile steelhead trout.

Understand the effects of an anadromous fish passage has on resident trout populations.

Member of stream habitat survey and channel type verification crew.

Assisted in stream classification and channel typing for timber harvest layout

Supervisor: Herb Roerick (208-392-6681)

Okay to contact this Supervisor: Yes

[REDACTED]
Position Applying For: Forester
Completed: 6/9/98

Date Application

Employer: Nez Perce National Forest
1194 and 3/95-9/95 Red River Ranger District
Dates employed: 5/94-
Salary:
Beginning \$ GS-5 Grangeville, ID 83530
Ending \$ same

Title: Hydrologic Technician **Supervisor:** Dave Gloss **Telephone:** (307)-326-5258

Number of employees supervised: 12/volunteer **Grade or rank:** GS-5
Reason for leaving: Job completed

Description of work:

Performed the duties of a National Forest District Hydrologic Technician. In addition to my duties associated with the collection and analysis of watershed data, I have participated in assessment and implementation of erosion control and Best Management Practices needed for a variety of resource activities. By utilizing prior knowledge and acquired skills, I have been instrumental in affecting positive land management techniques.

[REDACTED]
Completed: 6/9/98

Date Application

Employer: University of Idaho
5/94 and 9/95-12/95 College of Agriculture
Dates employed: 2/94-
Salary: Beginning \$ 5.25 per hour Moscow, Idaho 83844
Ending \$ same

Title: Soil Physics Research Technician **Supervisor:** Dr. John Hammel
Telephone: (208)885-6681

Number of employees supervised: 0 **Grade or rank:** NA **Reason for leaving:** Began Summer position

Description of work:

As a soil physics research assistant, I was involved with all aspects of soil field sampling, such as research plot surveying and layout, installation of

subsurface samplers and multiplexers, and core sampling. Monitored water levels for a perched water table study, with the use of piezometers. Installed, operated and maintained ring infiltrometers, to study the infiltration rates of soils with different tillage practices. Lab analysis consisted of running both soil moisture, bulk density, and nitrate level testing.



Date Application Completed: 6/9/98

Employer: Nez Perce National Forest **Dates employed:** 6/92-8/92 and 6/93-9/93 Grangeville, ID 83530 **Salary:**
Beginning \$ **Ending** \$ same GS-5

Title: Biological Technician **Supervisor:** Ms. Pat Green **Telephone:** (208)983-1950

Number of employees supervised: 0 **Grade or rank:** GS-5 **Reason for leaving:** Job completed

Description of work:

I worked as part of a two (2) person team collecting soil, vegetation, landform, and stream channel data used to develop a physical and biological classification of Forest streamside and wetland areas.

Educational: University of Wisconsin-Stevens Point Stevens Point, WI United States
Bachelor's Degree 05/1993
GPA: 3.01 of a maximum 4.00
Credits Earned: 142 Semester hours
Major: Watershed Management **Minor:** Soil Science

Job Related: AHERA Asbestos Inspector Training 4/7/10

Training HAZWOP 8 Hr. Refresher 10/12/10

:

Wetland Mitigation Rule Workshop 12/9/08

CWA 404 Training 10/3/08

Wetland Delineation Training 8/07

EPA Basic Inspector Training 7/20/07

Project Officer, Grants Management Training

Beginning Access 2000 for Windows

GPS Introduction to Federal Field Biologists

GIS Introduction for Conservation Professionals

Bureau of Reclamation Water Management Workshop

Rosgen Course I River Morphology and Applications 9/97

Rosgen Course II River Morphology and Applications 9/98

Rosgen Course III River Morphology and Applications 9/99

Referen ces:	Name	Employer	Title	Phone
	Mike Kelly	City of Austin	Environmental Engineer	(512) 461-8715
	Ronald McMullin	US Forest Service	Fisheries Biologist	(541)496-3532
	Westley Foster	USFW	Native American Liaison	<u>(480) 421-8889</u>
